DESCRIPTION OF A NEW SPECIES OF THE GENUS DOLICHOGENIDEA VIERECK

K. PANDEY^{2, 3}, Z. AHMAD^{2, 4}, A.A. HAIDER^{2, 5} AND SHUJAUDDIN^{2, 6}

¹Accepted July, 2004 ²Section of Entomology, Department of Zoology, Aligarh Muslim University, Aligarh 202 002, Uttar Pradesh, India. 3Email: kavi_leaf@yahoo.com ⁴Email: drazubair@gmail.com ⁵Email: drshujauddin@gmail.com

(HYMENOPTERA: BRACONIDAE) FROM INDIA¹

A new species of the genus Dolichogenidea Viereck, namely D. masoni sp. nov. is described and illustrated.

Key words: Hymenoptera, Braconidae, Microgastrinae, Dolichogenidea, new species, India

INTRODUCTION

The genus *Dolichogenidea* Viereck (1911) was synonymized with *Apanteles* Foerster by Muesebeck (1920). Later, Nixon (1965) treated the species described in *Dolichogenidea* as *ultor* species group of *Apanteles*. However, the genus *Dolichogenidea* was revalidated by Mason (1981). *Dolichogenidea* is closely related to the genus *Apanteles*, but it is easily distinguished in having margin of vanal lobe convex, rarely flattened and uniformly hairy; punctures of scutum distinct and well separated and T_1 parallel sided or slightly broader apically.

Nixon (1967) provided a key to the Indo-Australian species of the *ultor* group of *Apanteles*, and included 9 species from India. Recently, Sumodan and Narendran (1990) and, Sathe and Bhoje (2000) added 4 species to *Dolichogenidea*. In the present work, a new species, namely *D. masoni* sp. nov. is described from India.

Dolichogenidea masoni sp. nov.

(Figs 1-3)

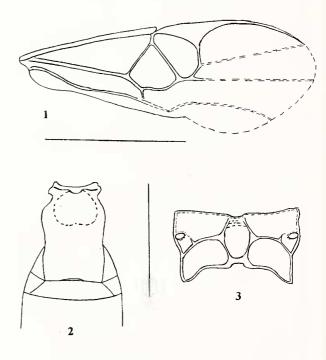
Female: 3.0 mm long.

Head: Transverse, 1.8x wider than long in dorsal view, with moderately dense white pilosity including eyes; vertex indistinctly punctate with hairs; OOL: POL: AOL: \emptyset OD = 5: 5: 2: 2; frons concave smooth and shiny medially, punctate elsewhere; face indistinctly punctate, 1.2x wider than long with an indistinct median dorsal node; clypeus indistinctly punctate; antennae slightly longer than the body.

Mesosoma: 1.6x longer than wide with moderately dense, white pilosity except mesopleuron medio-posteriorly and metapleuron; scutum 1.4x wider than long, coarsely punctate with hairs, punctures become dense and more distinct at imaginary course of notauli; scutellum smooth and shiny except for few indistinct setigerous punctures associated with hairs; sides of pronotum smooth and shiny

with a crenulate groove dividing into postero-dorsal and postero-medial arms; mesopleuron coarsely punctate anteriorly, smooth and shiny medio-posteriorly, metapleuron smooth and shiny; propodeum (Fig. 3) with U shaped areola, somewhat smooth and shiny anteriorly while very finely rugulose posteriorly; hind coxae large, smooth and shiny, almost reaching up to T_3 ; hind tibia 1.25x longer than hind femur; hind basitarsus 1.2x longer than outer tibial spur.

Wings: Fore wing (Fig. 1) with sparse pilosity in basal half, densely and evenly pilose in apical half; stigma 2.75x longer than wide, 0.9x longer than 1-R1; vein r about as long as maximum height of pterostigma and 1.6x longer than 2-SR,



Figs 1-3: *Dolichogenidea masoni* sp. nov. Υ 1. Fore wing; 2. T₁ and T₂; 3. Propodeum Scale Line: Fig. 1 = 1.0 mm, 2 & 3 = 0.5 mm angle between them distinct; discal cell slightly wider than long; vanal lobe of hind wing with long hairs basally, short and even hairs apically.

Metasoma: T_1 (Fig. 2) approximately 1.5x longer than wide, almost equally broad anteriorly as posteriorly, but slightly bulging sub-basally and slightly narrower medially, longitudinally rugulose-punctate over 0.6 of apical tergite; T_2 (Fig. 2) finely sculptured, 4.2x wider than long with slightly convex posterior margin; hypopygium large, medially folded; ovipositor sheaths 1.2x longer than hind tibia, uniformly hairy all along the length; ovipositor thick and stout and slightly curved downwards.

Colour: Black except for the following: mandible, antennae reddish brown; maxillary palpi, labial palpi and tibial spurs pale yellow; scape beyond apical rim, hind leg beyond coxae, basal part of basitarsus, mid leg beyond coxae, and fore leg are yellowish; apical hind tibia, apical segment of hind basitarsus, stigma brown and wings hyaline.

Male: Same as female except for following: Length 2.1 mm; antenna longer.

Holotype: \mathcal{P} , INDIA: Uttar Pradesh, Aligarh; 15.x.2001 ex. *Parotis* sp. on *Tabernaemontana divaricata*, Coll. Kavita Pandey, deposited in the collections of ZDAMU (Catalogue No. HB. 1030). **Paratypes**: 10 \mathcal{P} \mathcal{P} and 10 $\sigma \sigma$, data same as holotype.

Host: Reared from Parotis sp. (Lepidoptera: Pyralidae)

on Tabernaemontana divaricata.

Cocoons: White and heaped together in masses. **Distribution**: INDIA: Uttar Pradesh.

Etymology: The species is named after Dr. William R. Mason for his valuable contribution to our knowledge of microgastrine wasps.

Remarks: *Dolichogenidea masoni* sp. nov. closely resembles the Indian species *D. mohandasi* (Sumodan & Narendran), but differs in having (i) vertex indistinctly punctate (vertex finely rugulose in *mohandasi*), (ii) head 1.8x wider than long (head 1.5x wider than long in *mohandasi*), (iii) ovipositor slightly curved downwards (ovipositor uniformly curved in *mohandasi*), (iv) scutellum with few indistinct punctures (scutellum completely smooth and shining in *mohandasi*).

Abbreviations used: OOL- ocello-ocular line; POL- postocellar line; AOL- anterior-ocellar line; ØOD- diameter of an ocellus; ZDAMU- Zoology Department, Aligarh Muslim University.

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REFERENCES

(Hymenoptera: Braconidae). Bull. Brit. Mus. (Nat. Hist.) Ent. Suppl. 21: 1-34.

- SATHE, T.V. & P. BHOJE (2000): Biological pest control. Daya Publishing House, New Delhi. 122 pp.
- SUMODAN, P.K. & T.C. NARENDRAN (1990): Five new species of Apanteles Foerster (Hymenoptera: Braconidae) from India. J. Ecobiol. 2(3): 239-248.
- VIERECK, H.L. (1911): Description of six new genera and thirty new species of Ichneumon flies. Proc. U.S. Nat. Mus. 40: 170-196.

of the Ichnemon flies belonging to the genus *Apanteles*. Proc. U.S. nat. Mus. Wash. 58: 483-576.aasssssss NIXON, G.E.J. (1965): A reclassification of the tribe Microgastrinae

Microgastrinae. Mem. ent. Soc. Can. 115: 1-147.

(Hymenoptera: Braconidae). Bull. Brit. Mus. (Nat. Hist.) Ent. Suppl. 2: 1-284.

MASON, W.R.M. (1981): The polyphyletic nature of Apanteles Foerster

MUESBECK, C.F.W. (1920): A revision of the North-American species

(Hymenoptera: Braconidae) a phylogeny and reclassification of

NIXON, G.E.J. (1967): The Indo-Australian species of the ultor group